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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/803,457

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Robert Jerdonek

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EXAMINER

POLTORAK, PIOTR

ART UNIT

PAPER NUMBER

2134

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

8

Office Action Summary	Application No.	Applicant(s)	
	10/803,457	JERDONEK, ROBERT	
	Examiner	Art Unit	
	Peter Poltorak	2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/01/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings filed on 03/17/04 are informal. The purpose of drawings is to enable the understanding of the subject matter sought to be patented. However, applicant's submitted informal drawings require the specification to understand each objects presented in the drawings, since some of the labels are not clear (e.g. see label S2 (WOKKING MEMORY) or S4 (AS ?DIT DATABASE) in Fig. 2).

Applicant is advise to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

2. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes

made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Oath/Declaration

3. The Oath/Declaration is objected to because it does not identify the mailing address of the inventor. A mailing address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing address should include the ZIP Code designation. The mailing address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter

that applicant regards as the invention. Claims 1-12 appear to have problems with articles as well as consistency in reference to keys. For example, "key" in claims 8 lacks antecedent basis. The limitation of claim 9 recite "key usage", but in claim 11 the term "the key usage" is used. Furthermore, it is not clear to which "the secret key" claim 4 refer. Claim 4 is dependent on claim 1 recites "a secret key" to which a key server provides access and "a secret key" that a user is in possession of (although the examiner is not completely sure whether the second "a secret key" should not read "the secret key"). It is also not clear whether the claim language (e.g. claim 6-7) attempts to distinguish terms: "a key"/"the keys" from "a secret key"/"the secret key", or whether it refers to a generic event involving "a secret"/"the secret key". The terms "key access" and "key usage" (e.g. claim 8) is similarly not clear.

Applicant should ensure that the claim language is clear and consistent, and that any amendments are supported by the original specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 and 5-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fegghi et al. (Jalal Fegghi, Jalil Fegghi, Peter Williams, "Digital Certificates Applied Internet Security, 1999, ISBN: 0201309807).

Fegghi discloses a resource server (IIS server), that provides access to resources to authorized users (introduction in "Secure Web Communications-Client Authentication", pg. 323 and details disclosed in "Enabling SSL Client Authentication" and "Mapping Client Certificates to User Accounts", pg. 331-333), wherein authorization of a user is determined, at least in part, by the user's possession of a secret key (certificates include secret keys, see pg. 66-68, for example), a key server, that provides access to a secret key by an authorized user ("Getting a Client Certificate from a CA", pg. 326-327")

6. Although Fegghi discloses a key server audit database (e.g. "Certificate Revocation Lists (CRLs)", pg. 74), Fegghi does not disclose a resource server audit database, and a usage analyzer that analyzes the key server audit database and the resource server audit database to compare events therein.

However, the use of audit database on resource servers is well known in the art of computer security (e.g. Smith) and it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement audit database on resource servers given the benefit of increased security.

Also, comparing suspicious events in the resource server audit database with the key server audit database would have been obvious to an ordinary artisan in the art

of computer security, given the benefit of security (the key server audit database provides additional security information regarding the secret keys, in particular whether the keys are valid, see "Certificate Revocation Lists (CRLs)", pg. 74-76).

7. As per claims 2 and 3, even though, it is clear that the key server disclosed by Fegghi is an application server (CA server) and the resource server is a transaction server (IIS server), the examiner points out that the limitation as cited attempt to simply limit the limitation by providing a specific name to particular components. However, a particular naming of the components would not affect the functionality of Fegghi's invention.
8. As per claim 5-9, the limitations are obvious variation of security policies well known in the art (secure events are time and frequency sensitive (*Kerberos, Windows Log in etc.*), access restriction limitation based on source/destination address (*e.g. commonly implemented in firewalls*)). Thus implementing a particular security features recited in claims 5-9 would have been an obvious variation well known in the art. One would have been motivated to use them especially in light of the benefits of these security features as evidenced by their commercial success.
9. As per claim 10, the examiner points out that, there are inherently two obvious choices of performing any actions, in real-time and not in real-time, wherein each option is an obvious variation of another. Furthermore, the real-time responses are well known in the art of computer science and it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to analyze and compare

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audit database record in real-time given the benefit of computer efficiency (note that most of the logs are created in real-time).

10. The limitations of claim 11 are implicit: any security violation would trigger disablement of an access that is based on the secret key.

11. As per claim 12, any comparison of logs discussed above must involve two computers and the examiner points out that the placement of a usage analyzer (on the key server or key client) would have been an obvious variation not affecting functionality of Fegghi's invention. Additionally, the examiner points out that a client (e.g. a resource server) requesting a server (a key server) to process data (validate the secret key) is a standard feature in the client/server environment.

Conclusion

Claim 4 is a subject to the 35 USC § 112 rejection (see above). **However, the art of record does not teach or suggest the limitations (as best understood) of claim 4.**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Sarbari Gupta, "Security Characteristics of Cryptographic Mobility Solutions", 1st Annual PKI Research Workshop---Proceedings, July 02,

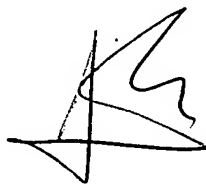
Sampo Sovio, N. Asokan, Kaisa Nyberg, "Defining Authorization Domains Using Virtual Devices", Nokia Research Center, Helsinki Finland, January 2003.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



9/13/07



KAMBIZ ZAND
SUPERVISORY PATENT EXAMINER